filed on October 27, 2004. Applicant again requests that the Examiner return an initialed copy of the form PTO-1449 in the next Office Action.

II. Disposition of Claims

The Examiner has rejected claims 1, 2, 7, 10, 13-21, 26, 29, 32-41, 45-48, 51-53 and 56-58 and has objected to claims 3-6, 8, 9, 11, 12, 22-25, 27, 28, 30, 31, 42-44, 49, 50, 54, and 55.

III. Claim Rejections - 35 USC § 102

The Examiner has rejected claims 1, 2, 7, 10, 13-21, 26, 29, 32-41, 45-48, 51-53 and 56-58 under 35 U.S.C. 102(e) as being anticipated by Okada et al. (US 6,177,968) ["Okada"]. For at least the following reasons, Applicant traverses the rejection.

Because claims 18, 19, 37 and 38 depend on claims whose subject matter is allowable, Applicant submits that these claims also contain allowable subject matter.

As an aid in understanding the present invention, Applicant notes that the present invention is based on the finding that the electric charges induced on the surface of the ferroelectric material are used to produce an image. Thus, the ferroelectric member and the contrast production member can be formed separately.

Turning to the specific claim language, claim 1 recites a method for displaying an image that comprises "producing a polarization inversion pattern in a ferroelectric member in accordance with image information so as to produce a surface charge pattern corresponding to the polarization inversion pattern." (emphasis added). The Examiner contends that Okada discloses this feature. However, the Examiner does not provide any specifics in his rejection.

Applicant requests the Examiner clearly communicate the findings, conclusions and their bases as is required by the MPEP. See MPEP 2100-22.

However, in the response to arguments section, the Examiner contends that the liquid crystal corresponds to the claimed ferroelectric member and substrate 22 corresponds to the claimed contrast production member. Okada discloses that that spontaneous polarization occurs between two stable states when an electric field is applied to the liquid crystal (col. 8, line 62-col. 9, line 45, Figs. 2 and 3). As best understood by us, the Examiner is contending that the charge provided by the electrodes 23 and 24 would correspond to (or produce) the claimed surface charge pattern.

Applicants submit that any charge pattern that may be disclosed by Okada is <u>for the formation of the polarizations</u> in the liquid crystal (the alleged ferroelectric member). There is no disclosure or suggestion that the polarization of the liquid crystal will, in turn, "produce a surface charge pattern" as set forth in claim 1. The Examiner's cited section clearly discloses the exact opposite with respect to the claimed surface charge pattern, i.e. that a charge (voltage on the electrodes 23 and 24) produces the polarization in the ferroelectric member, not that the polarization in the ferroelectric member produces the surface charge pattern.

Because claims 20 and 39 recite features similar to that given above with respect to claim 1, Applicant submits that these claims are patentable for at least reasons similar to those given above with respect to claim 1.

Applicant submits that the remaining claims are patentable at least by virtue of their respective dependencies.

In addition, claim 2 recites that the "polarization inversion pattern is produced by heating said ferroelectric member." The Examiner contends that the formation of ferroelectric liquid crystal device (Example 1) and the heat evolution caused by the current used to drive the panel (col. 2, lines 28-49) discloses this feature.

As stated above in claim 1, Okada discloses that the polarization of the liquid crystal (the alleged ferroelectric member) is performed by voltage across electrodes 23 and 26 or 24 and 26. Okada also discloses that the polarization also generates heat (heat evolution) due to the capacitance and drive frequency (see col. 2, lines 28-49).

Applicant submits that, to the extent that Okada may disclose a relationship between polarization and heat, it is that heat is generated due to the polarization process, not that the "polarization inversion pattern is produced by heating the ferroelectric member" as set forth in claim 2. Again, the Examiner's reliance on Okada is misplaced since the cited sections disclose the exact opposite of the claimed features.

Because claim 21 recites features similar to that given above with respect to claim 2, Applicant submits that claims 21 is patentable for at least reasons similar to those given above with respect to claim 2.

Claim 14 recites that the "contrast production member is made of an electrochromic material." The Examiner contends that because the electrodes 4 and 7 and alignment film 19 are electroconductive materials with transparent qualities and are used in a liquid crystal display, there will be a change in colors because the display produces numerous desired colors. Office Action at page 4.

As best understood by us, it appears that the Examiner is contending that because the ferroelectric liquid crystal has electrochromic properties and electrodes 4 and 7 and alignment film 19 are transparent, electrodes 4 and 7 and alignment film 19 also have electrochromic properties.

Applicant submits that, even if the electrodes and alignment film did correspond to a contrast production member, there is no disclosure or suggestion in Okada that an electrochromic material is used to make the electrodes and alignment film. The mere fact that other elements of a liquid crystal display may be made of an electrochromic material is irrelevant, and the fact that the electrodes and alignment film are transparent and can transmit colors does not mean that an electrochromic material was used to make them.

In addition, the Examiner contends in the rejection of claim 1 that substrate 22 is the alleged contrast production member (Office Action at page 4). It is improper for the Examiner to now contend that electrodes 4 and 7 and alignment film 19 are now the claimed contrast production member. Further, there is also no disclosure or suggestion in Okada that substrate 22 is made of an electrochromic material.

Because claims 33 and 53 recite features similar to those given above with respect to claim 14, Applicant submits that these claims are patentable for at least reasons similar to those given above with respect to claim 14.

Claim 40 recites that the "ferroelectric member is doped with a dopant which absorbs said infrared light." The Examiner contends that "even though the [oxide] dopant [in the cited sections] may not necessarily be used to absorb does not mean that it cannot and the Examiner

contends that the resistive sheet (19) can absorb the desired light." The Examiner does not provide any support in the prior art for his contention.

Inherency cannot be established by probabilities or possibilities. MPEP at 2100-54. To establish inherency the Examiner must show, with support in the prior art, that the oxide dopant would necessarily absorb infrared light. The Examiner's speculations that "the resistive sheet (19) [alignment film 19] can absorb the desired light," is not evidence in the record as required by *In re Zurko*, 59 USPQ2d 1693 (Fed Cir. 2001). In addition, assertion of technical facts must always be supported by the prior art. See MPEP at 2100-136.

Further, claim 40 recites that the ferroelectric member is doped. The Examiner, in his rejection of claim 1, contends that the liquid crystal corresponds to the claimed ferroelectric member. Applicant submits that the Examiner's shift to now contend that alignment film 19 is now the claimed ferroelectric member is improper.

With respect to claims 15-17, 34-36 and 45-47, the Examiner has not cited any section in Okada that disclose that the liquid crystal (the alleged ferroelectric member) has the features recited in the respective claims.

Claim 56 recites that the "charged particles are attracted to an area in said contrast production member corresponding to said polarization inversion pattern of said ferroelectric member to produce said image contrast." The Examiner contends that Okada teaches that alignment film 27 corresponds to the claimed base and that the base is on substrate 22. As best understood by us, the Examiner is contending that the alignment film 27 and substrate 22 correspond to the claimed contrast production member. The Examiner then speculates that

because particles are aligned, they must have been dispersed into the base and produce image contrast.

Okada discloses the formation of black and white pixels (contrast) by polarizing the liquid crystal to align with a rubbing direction on the alignment film (col. 9, lines 30-35). The black state and the white state correspond to an orientation with respect to a polarizer (see col. 9, line 45 to col. 10, line 6). The polarization of the light as it travels through the liquid crystal/alignment film/polarizer structure produces the contrast (white/black pixels).

To the extent Okada may disclose the attraction of particles, it is context of liquid crystal molecules during polarization within the liquid crystal (the alleged ferroelectric member), not an attraction to an area in the alignment film (the alleged contrast production member). Accordingly, Okada does not disclose or even remotely suggest that "charged particles are attracted to an area in said contrast production member corresponding to said polarization inversion pattern" as set forth in claim 56. (emphasis added)

Because claims 57 and 58 recites features similar to those recited above with respect to claim 56, Applicant submits that claims 57 and 58 are patentable for at least reasons similar to those given above with respect to claim 56.

IV. Allowable Subject Matter

Applicant thanks the Examiner for maintaining that claims 3-6, 8, 9, 11, 12, 22-25, 27, 28, 30, 31, 42-44, 49, 50, 54, and 55 as having allowable subject matter and for indicating that that these claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.